

# **Abstract**

## **Title:**

Comparing muscle timing during cycling on land and in water

## **Objective:**

The main goal of this thesis was to compare timing of muscles of lower extremities and of back muscles during cycling on land and in water.

## **Methods:**

In this experiment the relationship between muscles of lower extremities/back muscles and air/water was processed and analyzed. As an objectification was used surface electromyography. The same aqua bike Sapilo was used for both environments. Four women took part in the experiment. None of them was professional cyclist in the past.

## **Findings:**

Timing of muscles is similar for both environments. The influence of water was reflected in the speed of pedaling and in the level of muscle activity.

## **Keywords:**

surface electromyography, Water Surface EMG, timing, aqua bike

